

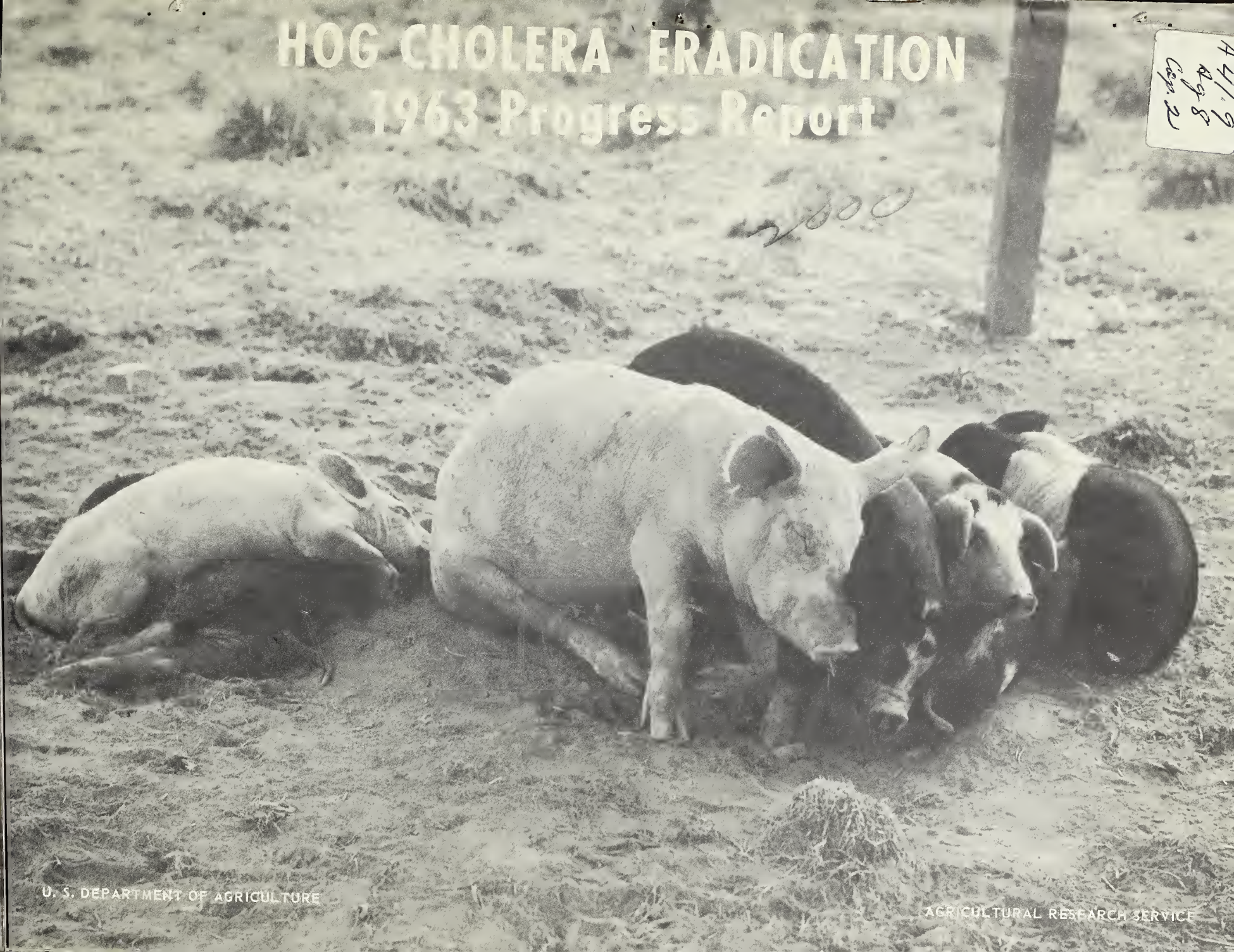
Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

HOG CHOLERA ERADICATION 1963 Progress Report

441.9
Ag 8
Cep. 2

2000



1963 PROGRESS REPORT--HOG CHOLERA ERADICATION

Prepared for Meeting of

USDA National Advisory Committee on Hog Cholera (February 1964)

and

Livestock Conservation, Inc., National Hog Cholera Committee (February 1964)

The purpose of this report is to provide a general outline of the progress made in the cooperative State-Federal hog cholera eradication program during 1963, as well as to describe some of the problems facing the program during the year ahead. It has been compiled from a comprehensive survey carried out in January 1964 and from regular reports received during the past year.

TABLE OF CONTENTS

	<u>Page</u>
NATIONAL PROGRESS REPORT--1963	1
Hog Cholera Eradication Program Map	3
Swine Covered by Hog Cholera Program	4
Hog Cholera Cost	5
Hog Cholera Eradication Procedures	6
Outbreaks Reported	7
Hog Cholera Vaccination	8
Sales of Hog Cholera Vaccines by States; April-June	9
Sales of Hog Cholera Vaccines by States; July-September	10

PROBLEMS AND PROGRESS--A STATE-BY-STATE ROUNDUP	11
---	----

	<u>Page</u>		<u>Page</u>		<u>Page</u>
Alabama	22	Louisiana	22	Ohio	19
Alaska	13	Maine	18	Oklahoma	13
Arizona	12	Maryland	24	Oregon	12
Arkansas	22	Massachusetts	20	Pennsylvania	20
California	11	Michigan	19	Rhode Island	20
Colorado	12	Minnesota	17	South Carolina	23
Connecticut	18	Mississippi	23	South Dakota	16
Delaware	21	Missouri	15	Tennessee	22
Florida	20	Montana	12	Texas	13
Georgia	21	Nebraska	16	Utah	13
Hawaii	13	Nevada	11	Vermont	17
Idaho	11	New Hampshire	18	Virginia	24
Illinois	16	New Jersey	19	Washington	12
Indiana	17	New Mexico	13	West Virginia	20
Iowa	14	New York	18	Wisconsin	15
Kansas	14	North Carolina	23	Wyoming	11
Kentucky	19	North Dakota	17	Puerto Rico	24

OTHER PROGRAM ACTIVITY	25
Table 1 (Enforcement)	25
Table 2 (Garbage-Cooking Laws)	25
Table 3 (Diagnostic Laboratories)	26
Table 4 (Diagnostic Laboratories)	26
Table 5 (Eradication Committees)	26
Table 6 (Eradication Committees)	27
Table 7 (Information Needs)	27

Progress in Hog Cholera Eradication, 1963

Introduction

By the end of 1963, a total of 38 States and Puerto Rico were formally enrolled in the State-Federal hog cholera eradication program. Four States came into the program in December 1962, shortly after the USDA adopted the cooperative program standards which had been recommended by the U. S. Livestock Sanitary Association. The ensuing 12 months marked the first complete calendar year the hog cholera eradication program has been in existence. During this period, 34 additional States and Puerto Rico entered the four-phase program, with three advancing to the final phase.

These 38 States contain 47 million hogs, which represents 80 percent of the "swine on farms" according to the 1963 Agricultural Census. In addition, 21.5 million of these hogs--37 percent of the Nation's swine population--are in the 16 States which have advanced beyond the initial phase of the eradication program.

Outbreak Investigation

Starting in July 1963, a nationwide system for reporting results of investigations of hog cholera outbreaks was initiated. This provides information not only on the number of outbreaks reported in the Nation, but also on the results of the investigations--such as whether the sickness was actually cholera and whether or not a probable source of infection could be determined.

During the last six months of 1963, a total of 772 hog cholera outbreaks were reported. Investigations were completed on 665 of these.

In 60 percent of the outbreaks studied, investigators concluded that a source of infection was determined, or that the sickness was not hog cholera. This compares favorably with a survey made in the spring of 1962 which showed success in only 35 percent of the investigations.

States in the program were able to trace the infection much more successfully than States not in the program. Here is a breakdown:

	Investigations Completed	Percent not Hog Cholera or Traced to Probable Source
States not in program	65	30%
States in the program	600	68%

Garbage Feeding

Inspection of garbage-feeding establishments was intensified during the year. For example, in January 1963, only 74 percent of the nearly 9,300 garbage-feeding establishments were inspected. Figures were not available at that time for twice-monthly inspections. By the following June, the once-a-month figure had risen to 85 percent of almost 10,000 premises, and some 53 percent were inspected twice monthly. By December 1963, the respective figures had risen to slightly over 10,000 premises--89 percent inspected once, and 63 percent inspected twice. None of these figures include information on garbage feeding in Texas, as their reports have been based on estimates throughout the year.

However, a number of States still feel that they have garbage-cooking problems. A summary of their response is reported on page 25 (Table 2). Generally, those who reported problems commented that the problem involves either additional personnel for inspection or difficulties encountered in prosecuting apparent violators.

Vaccination

During the year, the USDA's Animal Inspection and Quarantine Division, with the cooperation of the biologics industry, started a quarterly report showing the State-by-State breakdown of vaccine sales by producers and distributors. Two quarterly reports have been issued. The first covered April, May, and June; the second July, August, and September. These reports are attached.

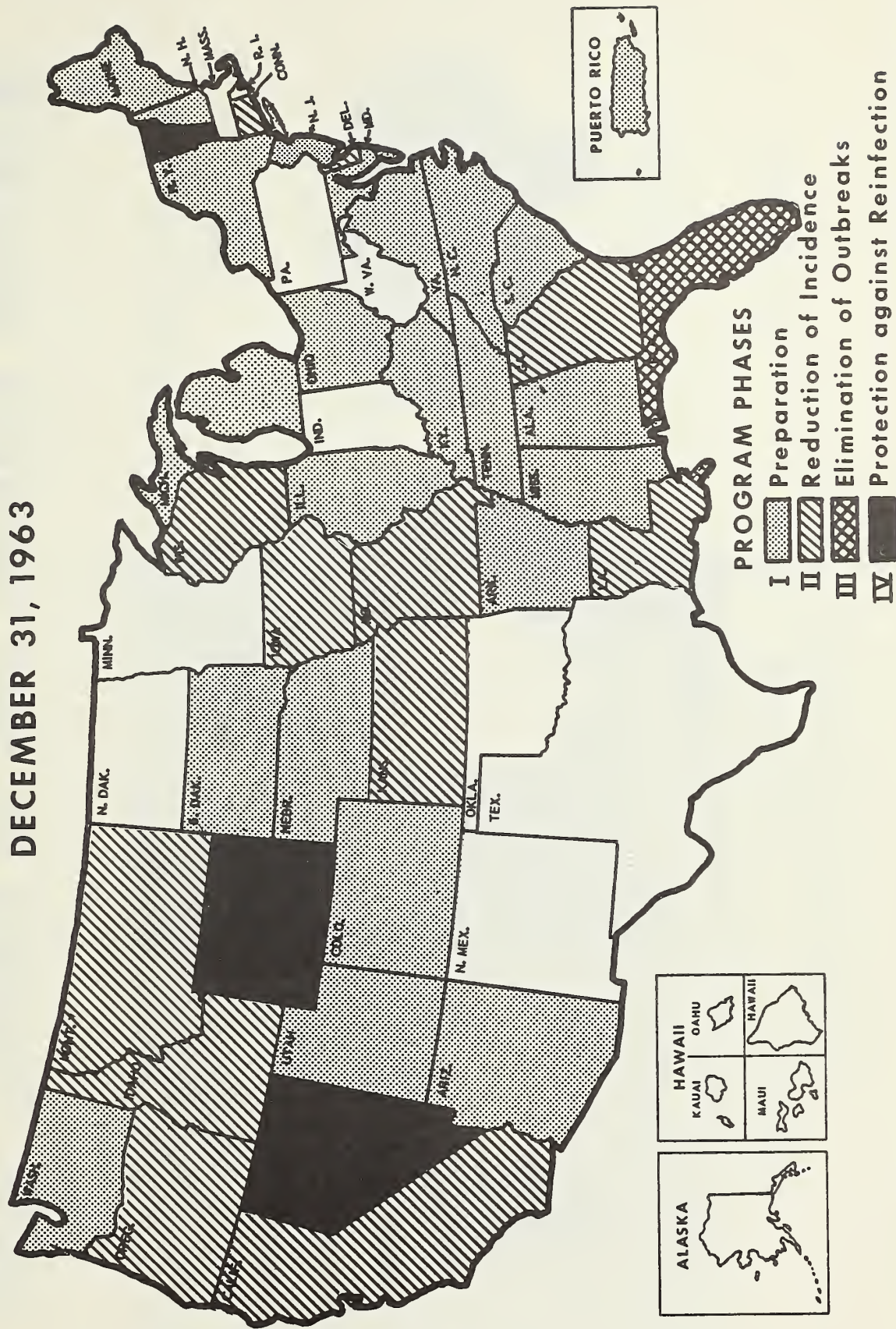
Using figures from the spring report and from the Pig Crop Report, it is estimated that 46 percent of the eligible pigs could have been vaccinated during this period. National pig crop figures are not available for comparison with vaccine sales in the second report.

Generally, vaccine sales during the year compared well with 1962, being about even or slightly ahead on a month-to-month basis, until October 1963. Although vaccine sales usually experience a seasonal drop in late summer and early fall, in October of this year, sales dropped sharply below those of the previous October. November sales, however, returned to 97 percent of sales in November 1962.

Vaccine sales for the first 11 months of the year are also 97 percent of sales for the same period in 1962. The decrease is due mainly to the sharp decline in sales in October this year.

Hog Cholera Eradication Program

DECEMBER 31, 1963



SWINE COVERED BY HOG CHOLERA PROGRAM

DEC.
1962

JUNE
1963

DECEMBER
1963

JUNE ESTIMATE
1965



1,200,000



41,000,000



47,300,000



58,700,000

SWINE UNDER PROGRAM

0

13,800,000

21,500,000

53,100,000

NUMBER BEYOND INITIAL PHASE

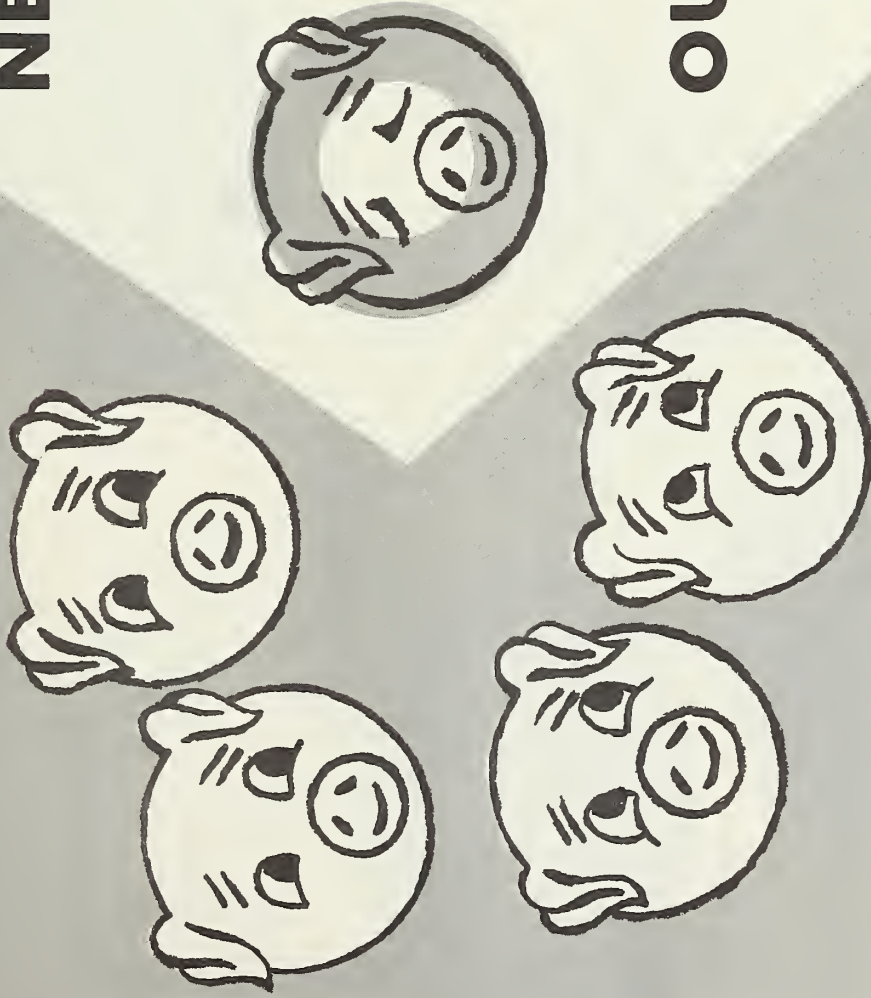


HOG CHOLERA COST?

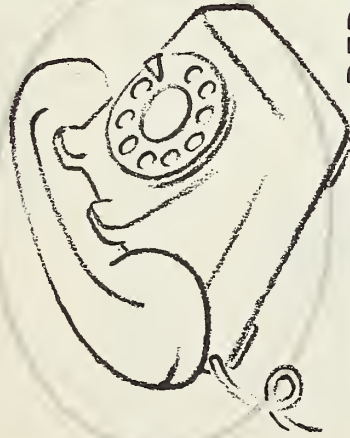
**NET PROFIT
FROM**

ONE

**OUT OF EVERY FIVE
HOGS MARKETING**



PROCEDURES



REPORTING



VACCINATION



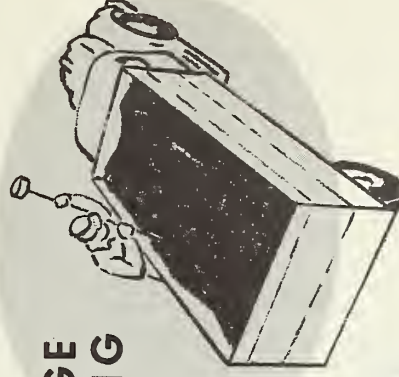
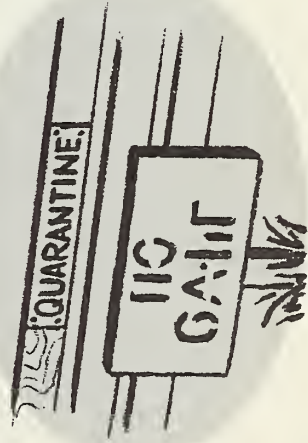
INVESTIGATION



DIAGNOSIS



DISPOSAL

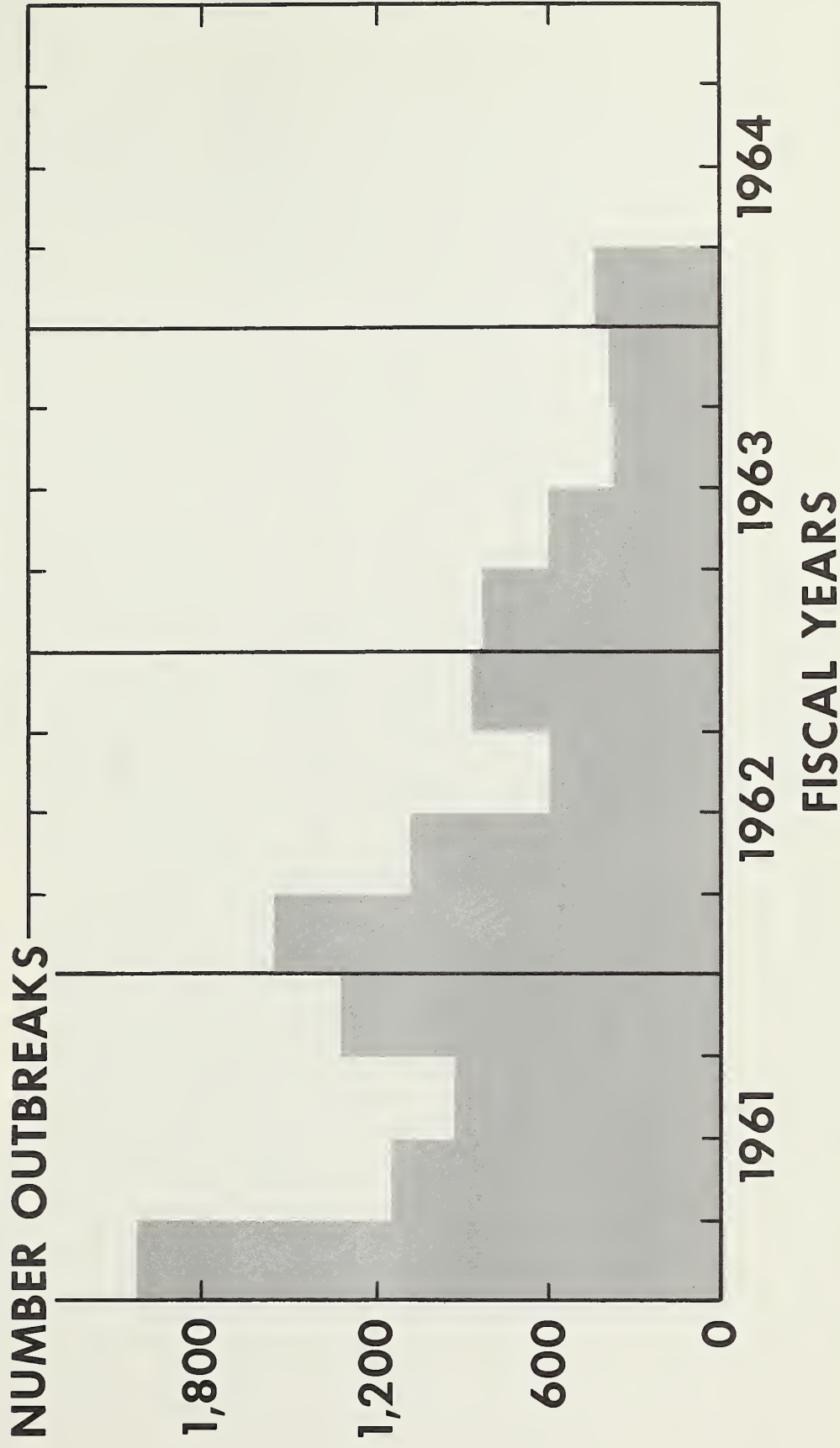


GARBAGE
COOKING

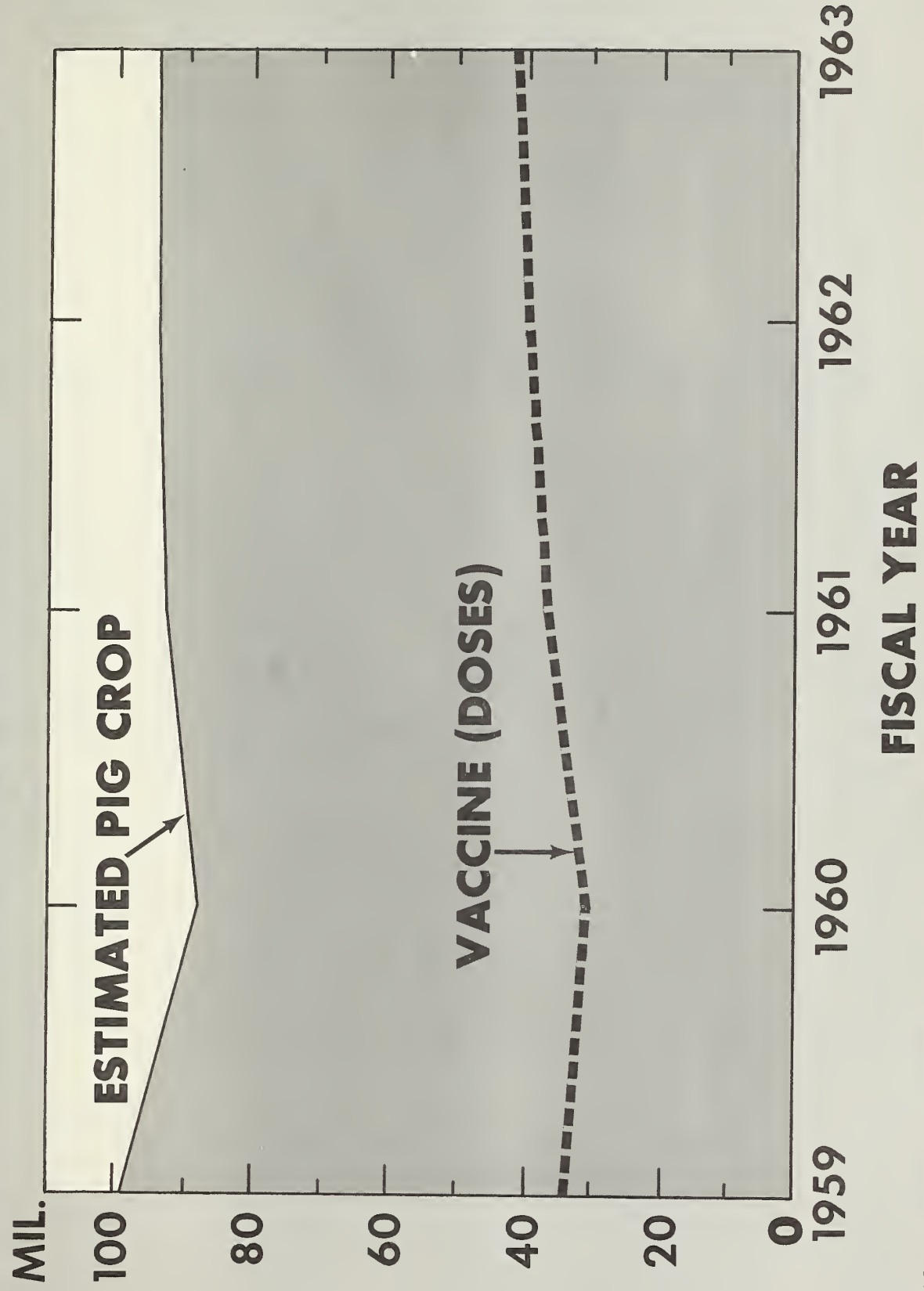


Hog Cholera Eradication

OUTBREAKS REPORTED



HOG CHOLERA VACCINATION



*COST BORNE BY PRODUCER

U. S. DEPARTMENT OF AGRICULTURE

AGRICULTURAL RESEARCH SERVICE

UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Research Service
Animal Inspection and Quarantine Division
Federal Center Building
Hyattsville, Maryland 20781

August 13, 1963

SALES OF HOG CHOLERA VACCINE
BY STATES*

APRIL - MAY - JUNE 1963

State	Modified Vaccines Doses	Inactivated Vaccines Doses	Total Sales	Estimated Pig Crop** 1,000 head
Alabama	41,152	5,713	46,865	696
Arizona	3,788	-	3,788	20
Arkansas	51,288	2,103	53,391	230
California	62,123	5,239	67,362	302
Colorado	41,990	3,218	45,208	168
Connecticut	3,709	-	3,709	9
Delaware	27,474	12	27,486	33
Florida	110,143	-	110,143	195
Georgia	360,001	12,812	372,813	1,162
Idaho	15,151	215	15,366	122
Illinois	2,065,317	153,774	2,219,091	6,798
Indiana	1,243,310	23,757	1,267,067	3,994
Iowa	5,111,207	397,388	5,508,595	11,456
Kansas	238,021	9,365	247,386	1,274
Kentucky	123,272	98,640	221,912	1,166
Louisiana	32,339	275	32,614	101
Maine	1,178	-	1,178	14
Maryland	27,930	474	28,404	138
Massachusetts	32,131	-	32,131	77
Michigan	13,320	28,577	41,897	581
Minnesota	799,785	217,220	1,017,005	3,580
Mississippi	36,977	927	37,904	330
Missouri	715,601	26,205	741,806	3,399
Montana	7,119	300	7,419	142
Nebraska	820,981	100,013	920,994	2,784
Nevada	996	-	996	9
New Hampshire	2,710	-	2,710	9
New Jersey	9,609	336	9,945	53
New Mexico	5,308	265	5,573	33
New York	13,023	1,190	14,213	68
North Carolina	195,195	529	195,724	1,095
North Dakota	11,283	9,417	20,700	429
Ohio	696,573	9,826	706,399	2,098
Oklahoma	55,087	719	55,806	298
Oregon	8,897	263	9,160	117

State	Modified Vaccines Doses	Inactivated Vaccines Doses	Total Sales	Estimated Pig Crop** <u>1,000 head</u>
Pennsylvania	39,034	539	39,573	418
Rhode Island	1,331	-	1,331	5
South Carolina	100,405	1,656	102,061	328
South Dakota	636,517	126,947	763,464	2,010
Tennessee	119,318	48,879	168,197	1,007
Texas	82,554	1,114	83,668	612
Utah	2,076	63	2,139	41
Vermont	705	-	705	9
Virginia	107,642	298	107,940	525
Washington	12,143	620	12,763	111
West Virginia	9,885	260	10,145	61
Wisconsin	170,797	11,440	182,237	1,885
Wyoming	2,006	300	2,306	26

Hawaii	14,253	2,016	16,269	36
Export	629,708	42,871	672,579	-
TOTAL:	14,912,362	1,345,775	16,258,137	50,054

* 11 Wholesalers handling less than 1/2 of 1 percent did not report sales.

** Figures relating to estimated pig crop obtained from Pig Crop Report for June 1963 and represents farrowings December 1962 through May 1963.

For estimating purposes the 10 Corn Belt States showed 68% of their total pig crop for months of March - April - May which is the period most closely approximating this report

UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Research Service
Animal Inspection and Quarantine Division
Federal Center Building
Hyattsville, Maryland 20781

November 20, 1963

SALES OF HOG CHOLERA VACCINE
BY STATES*

JULY - AUGUST - SEPTEMBER 1963

State	Modified Vaccines Doses	Inactivated Vaccines Doses	Total Sales
Alabama	53,258	92,285	145,543
Arizona	3,309	-	3,309
Arkansas	53,209	2,456	55,665
California	58,994	2,329	61,323
Colorado	33,786	3,490	37,276
Connecticut	4,157	-	4,157
Delaware	35,269	100	35,369
Florida	131,465	50	131,515
Georgia	314,728	2,821	317,549
Idaho	10,184	120	10,304
Illinois	1,716,716	139,310	1,856,026
Indiana	1,110,009	35,491	1,145,500
Iowa	2,503,345	280,511	2,783,856
Kansas	148,090	10,134	158,224
Kentucky	74,823	5,783	80,606
Louisiana	22,741	819	23,560
Maine	2,711	-	2,711
Maryland	29,978	874	30,852
Massachusetts	44,688	-	44,688
Michigan	13,324	25,540	38,864
Minnesota	336,444	118,886	455,330
Mississippi	22,561	457	23,018
Missouri	771,931	45,049	816,980
Montana	4,350	676	5,026
Nebraska	454,354	70,471	524,825
Nevada	706	180	886
New Hampshire	1,755	-	1,755
New Jersey	14,098	5	14,103
New Mexico	4,744	702	5,446
New York	10,101	539	10,640
North Carolina	169,758	718	170,476

State	Modified Vaccines Doses	Inactivated Vaccines Doses	Total Sales
North Dakota	2,494	8,608	11,102
Ohio	634,158	7,287	641,445
Oklahoma	35,516	2,249	37,765
Oregon	9,437	877	10,314
Pennsylvania	42,059	410	42,469
Rhode Island	2,410	-	2,410
South Carolina	116,923	2,342	119,265
South Dakota	194,122	64,884	259,006
Tennessee	109,495	2,500	111,995
Texas	90,599	3,519	94,118
Utah	3,360	30	3,390
Vermont	770	-	770
Virginia	103,305	990	104,295
Washington	11,167	2,902	14,069
West Virginia	10,711	321	11,032
Wisconsin	158,670	8,356	167,026
Wyoming	1,952	428	2,380
Hawaii	8,857	1,410	10,267
Export	454,938	20,450	475,388
TOTAL:	10,146,529	967,359	11,113,888

* 12 Wholesalers handling less than 1/2 of 1 percent did not report sales.

Problems and Progress -- A State-By-State Roundup

THE FAR WEST

Nevada and Wyoming--two of the three States in the final phase of the program--entered this phase together last September 30. Both States are set up to handle any outbreak of hog cholera on an emergency basis, with immediate quarantine of all cases suspicious of hog cholera, depopulation of the entire herd, and a complete investigation. In addition, both States have a system in effect for alerting farms in an area surrounding a reported outbreak of hog cholera. In Nevada, swine owners would be alerted by personal contact as necessary. Wyoming's system, in effect since the start of the eradication program there, calls for newspaper and radio publicity, as well as personal contact of all farms in an area at least three miles around the outbreak. This warning system would be in effect within 24 hours of the time the outbreak was reported.

Wyoming, which has not reported hog cholera since 1957, entered Phase I of the cooperative program in December 1962. Entry into the program was preceded by a statewide survey to determine the incidence of hog cholera, as well as the swine-raising practices of the area. The State moved to Phase II of the program in June 1963 and to Phase III a month later in July. Nevada, whose last reported outbreak occurred in 1960, was able to initiate the program at the Phase III level in March of last year.

As might be expected, both States are facing similar problems. These primarily concern difficulty in obtaining unvaccinated pigs or pigs vaccinated with killed virus for shipment into the States.

California entered Phase I of the program in March of 1963 and moved to Phase II on the last day of the year. Their goal for entering Phase III is July 1964, and no problems are anticipated in meeting this deadline.

The most significant achievement in California in 1963 was the adoption of State regulations on hog cholera eradication. These regulations provided for setting up State-approved markets, for control over the use of vaccines, and for more stringent import regulations over feeder pigs and breeding stock. Only three outbreaks of hog cholera were reported in the State in 1963.

Idaho had no hog cholera reported last year, and regulatory officials call their biggest achievement the fact that the disease has not been known in the State for the past five years. Idaho initiated the cooperative program in March, moved to Phase II in June, and plans to go to Phase III as soon as a program for herd depopulation is set up. Indemnity payments figure in Idaho's plans for Phase III.

Its neighbor, Montana, also did not report any hog cholera during 1963. This State initiated the joint program at the Phase II level last February and plans to go into Phase III as soon as possible. The State presently does not foresee a need for payment of indemnity for hog cholera.

Oregon, which moved directly into Phase II of the program in mid-March of last year, reported only one outbreak of hog cholera in 1963. Oregon plans to go into Phase III early in 1964, having a goal of February 1st.

The State feels that the primary problems confronting it in moving into advanced stages of hog cholera eradication is the elimination of the use of modified live virus vaccine. Pigs shipped from markets back to farms within the State are not permitted to be vaccinated with modified live virus vaccine and serum. However, this procedure is allowed for inter-state shipments to States requiring this method of vaccination.

Washington was one of the first States to enter the program--in mid-December 1962. With the State meeting its goal of January 1964 for entering Phase II, an entire block of seven States in the Northwest and Far West will have moved into the advanced stages of the eradication program.

Washington, which had three outbreaks reported in 1963, feels that its biggest problem area will be in providing money and personnel to carry out the eradication program in a State where hog cholera is a very minor problem. The two most significant achievements in the State during the past year were (1) the tightening of State shipping rules concerning vaccination and identification of feeder pigs and (2) a change in State law which provides for indemnity payment for hogs destroyed because of hog cholera when that stage of the program is reached.

Arizona, which entered Phase I of the program in late April, has been plagued with a problem in requirements for garbage cooking. Specifically, their present garbage-cooking law exempts any feeder with less than 50 head of hogs.

However, a new garbage-cooking law which strengthens the requirement that all garbage fed to hogs be cooked and which redefines the word "garbage" is being presented to the State Legislature in January 1964. If adequate legislation is passed, Arizona plans to move directly into Phase IV of the program in late 1964. There were no reported outbreaks of hog cholera in the State in 1963.

Colorado also had a problem with garbage-cooking regulations. However, with support from the State Hog Cholera Eradication Committee and the swine industry, veterinary officials were able to get regulations adopted which prohibit the feeding of raw garbage, and Colorado entered Phase I of the program this past November.

The State believes that one of its biggest needs is for education concerning the program. Its goal for reaching Phase II of the program is July 1964. Six outbreaks of hog cholera were reported in Colorado last year.

Utah, which entered the program in April, is another State with garbage-cooking problems. Regulatory officials have encountered difficulties in bringing apparent violators before the courts. However, the need for adequate processing of garbage has been discussed with county officials, and this situation has now been corrected. This is regarded as the most significant program achievement of the year by Utah regulatory officials.

Five States in the Far West--Alaska, Hawaii, New Mexico, Texas, and Oklahoma--are not yet in the cooperative program.

Alaska has a very small swine population--some 1500 head. Hog cholera has not been reported in the State for many years. No information was received from Alaska in response to the survey for 1963.

Hawaii has no specified goal for entering the program. With 10 outbreaks of hog cholera reported last year, one of their main problems has been adequate inspection of garbage-feeding premises. Inspectional activities are being intensified, however, as indicated by the fact that 59 percent of the garbage-feeding premises were inspected in December 1963 as compared with 22 percent in the preceding January.

Officials also note that reporting of hog cholera outbreaks has been considerably improved during the past year.

New Mexico's goal for entering the cooperative program is July 1, 1964. Their main problem is with garbage feeders, although officials feel that the situation is improving. They also feel that they need additional personnel to gather positive evidence of violations and to increase inspections. Other problems include getting more swine officially vaccinated and individually identified.

Texas has not advanced plans for entry into the cooperative eradication program. The Texas Animal Health Commission has appointed one of its members to study the possibility of entering the program. Results of this study are not yet available. Inspection for garbage cooking has been lacking, with only a fraction of the garbage feeders inspected, and with most of the data on the subject estimated.

There were eight outbreaks of hog cholera reported in the State last year.

Oklahoma, which reported 67 outbreaks of hog cholera last year, has no definite goal for entering the program. Officials think they need to stimulate more interest among producers, although they feel that they are making some progress in this area.

Two major problems are foreseen. One concerns additional legislation necessary to control intrastate shipments of hogs. The other is in the area of garbage feeding. Regulatory personnel have had difficulty in obtaining the evidence required by county courts for conviction of apparent violators of the garbage-feeding law.

Kansas has more in common with the Midwest and North Central States than the Rocky Mountain and Far Western States from the standpoint of hog population and production methods. Kansas initiated a cooperative hog cholera eradication program at the end of February 1963 and moved into Phase II in August.

During the past year the Kansas veterinary field force has been organized to put quarantines into effect and to investigate all outbreaks which are reported. There were 19 outbreaks reported in the State during the past 12 months.

Kansas, while not reporting a definite goal for entering Phase III, is exploring the problems to be solved prior to moving to this phase. One of these is whether or not to pay indemnities.

The State lists as its major accomplishments four items: reporting, investigation of outbreaks, quarantining, and cleaning and disinfection.

THE NORTH CENTRAL STATES

Three States in this region--Iowa, Missouri, and Wisconsin--are in Phase II of the program.

Iowa entered the program in Phase I the last of January 1963 and five months later, in June, moved into the "Reduction of Incidence" phase. During the year the State noted a significant decrease in the number of outbreaks. This decrease--from 429 outbreaks reported in 1962 to only 263 last year--was attributed in large part to the institution of a "Minute Man Warning System" to alert swine producers in the area surrounding an outbreak.

Here's how Iowa officials describe their successful system: After an outbreak is reported by phone to the State Veterinarian, the livestock inspector serving the area is also notified by phone. He promptly contacts the county agent and then calls on each farmstead within a three-mile radius of the outbreak. At each farm he distributes (1) a "notice of outbreak" letter which suggests that the producer contact his local veterinarian, and (2) a USDA pamphlet, PA 577, "What you should know about HOG CHOLERA."

Iowa's goal for moving into Phase III is 1965. However, before this goal is reached the State needs legislation to provide for indemnities. Also, officials feel they need greater diagnostic capability plus a continued educational program to explain and gain acceptance of an indemnity program.

Missouri moved directly into the program at the Phase II level in late December 1963. Before coming into the program, Missouri completely revamped its reporting system. The present setup calls for an immediate report--by collect phone call to the State Veterinarian's office--of any suspected hog cholera by either the veterinarian or owner of the hogs. Responsibility for reporting rests equally on these two individuals.

Missouri has initiated a system for warning farmers surrounding a hog cholera outbreak. Livestock inspectors alert neighbors within three miles of an outbreak, advising them on vaccination, sanitation, and reporting. Information on the program is distributed.

Missouri anticipates entering Phase III of the program sometime during the latter half of 1965, depending on program progress and availability of State-Federal funds and personnel. The State feels that its biggest problems fall in the area of shipments of swine, particularly feeder pig movements. Officials feel that State regulations must be changed--through legislation--to provide for more adequate control over shipments of freshly vaccinated pigs within the State. They also feel that interstate regulations should be strengthened.

With 12 outbreaks of hog cholera reported last year, Missouri feels that its most significant achievements were instituting compulsory reporting, followed by complete State-Federal investigations to determine the source of the disease.

Wisconsin initiated the program in late June and entered Phase II in August. Goal for moving to Phase III is 1968. Problems in reaching this goal are primarily concerned with legislative changes to provide for indemnity payments and greater control over the use of modified vaccines.

The past year was spent (1) in developing methods for investigation of all hog cholera outbreaks and (2) informing all segments of the swine industry about the hog cholera eradication program, its aims, and its methods of achieving these aims. A warning system, in effect for the past year, provides for personal contact of all farmers adjacent to the infected premises. This is done by the hog cholera epidemiologist starting immediately after the diagnosis is confirmed.

The State feels that its biggest problem area lies in the use of modified live virus hog cholera vaccines. There were 14 outbreaks of hog cholera reported in Wisconsin in 1963.

Illinois has been in Phase I of the program for almost all of 1963, starting in mid-January of last year. The State feels that its most significant achievement during the year has been a 42 percent reduction in reported outbreaks over 1962. One hundred eighty-five outbreaks were reported last year. Goal for entry into Phase II is January 1964.

Illinois--like Iowa, Missouri, Wisconsin, and others--has a system for alerting farmers in the area surrounding a reported outbreak. In Illinois, when several hog cholera outbreaks occur in a county during a short period of time, a special publicity and warning campaign is started. The live-stock inspector makes personal contact with farmers in a three or four mile square area around the outbreak, advising them of the presence of the disease. He recommends vaccination and other procedures to prevent the spread of hog cholera, and leaves a mimeographed information piece with the farmer. According to Illinois officials, local veterinarians have reported increased interest in vaccination following such warning campaigns.

Illinois feels that its biggest problems at present revolve around tracing methods by which the disease spreads--that is, how it travels from herd to herd.

Nebraska also entered the program at the Phase I level a year ago in January 1963. Their problems during the past year have been primarily concerned with the importation of feeder pigs, in that shippers found it difficult to meet both State and Federal requirements. However, this problem has been resolved by joint State-Federal approval of certain markets which have trade areas extending outside the State. Nebraska has not established a goal for entering Phase II and feels that this will depend on the incidence of the disease and the availability of funds. Increasing the vaccination level, as well as legislation providing for indemnity payments, is needed before the State can move into advanced stages of the eradication campaign.

Twenty-nine outbreaks of hog cholera were reported in Nebraska last year. The State feels that its biggest problem is to convince the swine industry that eradication is feasible. One particularly bright spot in the Nebraska program during the past year was the continued active support of their State Hog Cholera Committee.

South Dakota began Phase I of the program in July and has no anticipated date for moving to Phase II. Officials foresee the need for authority requiring dealers to keep records, as well as changes in shipping rules. South Dakota feels, however, that assistance of the State Advisory Committee on Hog Cholera will be helpful in overcoming these obstacles. Another problem lies in lack of control over hog cholera biologics, which sometimes results in improper vaccination.

As most significant achievements of the year, South Dakota lists (1) reporting outbreaks by telephone, (2) quarantine of infected and exposed herds, and (3) entry into Phase I of the cooperative program. There were 29 outbreaks during 1963.

North Dakota has not entered the program yet and has not set a goal. Seven outbreaks of hog cholera were reported in the State last year.

All living hog cholera vaccines are prohibited in North Dakota, except for purebred swine intended for interstate shipment. The State lists as its most significant achievement the fact that swine vaccinated with living virus are required to be held for 21 days prior to movement into North Dakota.

Minnesota plans to enter the program prior to July 1, 1964. They believe that the State Committee will supply the initiative to get the State into the cooperative eradication campaign by that date.

During the year the State provided for quarantine of infected and exposed herds. Reported outbreaks dropped from 214 in 1962 to only 68 last year, and this was regarded as the State's major achievement. The main problem area seems to be a low level of vaccination.

Indiana has no definite date set for entry into the program, but they believe that it will be before July 1964. Inspection of garbage feeders has increased sharply, with a jump from 24 percent inspected twice monthly in November to 94 percent in December. The State also instituted quarantine procedures for hog cholera suspicious herds during the year. Reporting of outbreaks by veterinary practitioners can be by mail. Investigation of outbreaks is done at the request of the reporting veterinarian.

Indiana reported 55 outbreaks of hog cholera during 1963. Biggest achievement was adoption of State hog cholera regulations which put tighter controls over shipment of feeder pigs. The regulations also restrict the use of virulent virus.

The State is considering a warning system for farmers near an outbreak and would like more information on how other States are developing such systems.

THE NORTHEAST

Vermont was able to initiate the program at the Phase IV level. It, like Nevada and Wyoming, entered the fourth and final phase of the program on September 30.

And again, like the two western States, Vermont is set up to handle any outbreak of hog cholera on an emergency basis. This would include immediate quarantine of the herd, complete investigation by regulatory veterinarians, confirmation of diagnosis by the University of Vermont laboratory, and depopulation of the entire herd.

If an outbreak should occur before September 1, 1964, Vermont does not plan to indemnify the owner, but after that date indemnities are planned for any outbreak which might occur. Hog cholera has not been reported in Vermont since December 1961.

The State feels that the only possibility for infection being introduced is through a violation of shipping rules or through a slip-up in garbage-cooking procedures. Live virus vaccines are prohibited under Vermont statutes. As in the case of the other eradication States, Vermont anticipates difficulty in acquiring replacement animals from other States which are either unvaccinated or vaccinated with inactivated vaccines.

Connecticut initiated the program in February and just recently--in December--moved to Phase II. The State feels that adoption of intensified garbage-cooking procedures and an increased vaccination rate were its biggest achievements last year. No hog cholera outbreaks were reported during 1963. Connecticut plans to move to Phase III by July 1964.

Maine entered Phase I of the program last April and plans to go to Phase II in February 1964. Although the State has reached the twice-monthly level for inspection of garbage feeders, it has not been able to maintain that rate and reports this to be the biggest problem.

In Maine, only two cases of hog cholera were reported during the year. The State has instructed veterinarians to report outbreaks immediately by telephone in order to meet standards for moving to Phase II of the program.

New Hampshire is roughly at the same point in the program as Maine. Although it entered the program earlier--December 1962--its goal for entry into Phase II is one month later--March 1964. Again, like Maine, New Hampshire has reached twice-monthly inspection of garbage feeders, but until now has not been able to maintain this level.

Veterinarians in the State have also been instructed to report outbreaks by telephone. There were no outbreaks of hog cholera reported in New Hampshire in 1963.

New York, which entered Phase I last June, plans to move to Phase II by April 1964. Problems include closer supervision of commission markets and garbage-feeding facilities.

The State, which reported no hog cholera last year, has a warning system in effect which calls for personal contact by State supervising veterinarians of all premises within a four to five mile radius of an outbreak.

New Jersey also initiated the program last June. Surveillance of garbage-fed hogs is a considerable task in New Jersey because of the size of the garbage-feeding industry. However, the State is coping with this by intensive inspection of selected premises and by inspection of premises at other than routine times--for instance, large-scale inspection on weekends. The State anticipates moving directly to Phase III during 1964.

Michigan was inspecting garbage feeders once monthly until recently. The State is prepared to undertake twice-a-month garbage-feeder inspection and anticipates moving into Phase II. Michigan entered Phase I in August 1963.

With six reported outbreaks last year, Michigan has had a problem of feeder pigs being shipped into the State without the proper health papers. Most significant achievement last year was prohibiting the use of all living hog cholera vaccines except under permit from State officials.

Ohio, which entered the program last February, plans to move to Phase II by January 1965. Ohio's major problems involve bi-monthly garbage inspections and compulsory reporting of the disease.

Most significant achievement during the year was reactivation of the Ohio Hog Cholera Eradication Committee. There were 74 outbreaks of hog cholera reported in the State last year, which was considerably below the level of several years ago.

Kentucky entered Phase I of the cooperative program in January 1963 and plans to spend the next six months as an intensive education period so that the program can be fully activated at the Phase II level by this coming July. In this connection, the State recently formulated a regulation requiring vaccination of pigs 21 days prior to movement.

Kentucky reports that approval of this regulation, plus the overall interest of the swine industry, represented the most significant achievements during 1963. The six-month intensive education effort will be carried out cooperatively by county agents, local county hog cholera committees and feeder-pig associations, and State-Federal regulatory personnel. Kentucky reported 37 outbreaks of hog cholera last year.

Four States in the Northeast--Pennsylvania, West Virginia, Massachusetts, and Rhode Island--had not initiated the cooperative hog cholera eradication program by the end of 1963.

Pennsylvania, which plans to enter the joint program prior to this coming July, instituted a quarantine system for hog cholera suspicious herds during the past year. Twenty outbreaks of hog cholera were reported in Pennsylvania in 1963.

West Virginia has no definite goal for entry into the program. The State hopes to obtain twice-monthly inspections of garbage feeders by spring.

West Virginia's problems in initiating the program center around the lack of a fully developed reporting system. Although procedures for immediate reporting have been outlined, West Virginia feels that this factor must be active prior to program entry. It is reported that additional manpower may be needed to investigate reported outbreaks and provide laboratory diagnostic services.

Passage of a strengthened garbage-feeding law was regarded as the major achievement in the State in 1963.

Massachusetts and Rhode Island have about the same situation and face similar problems. Although neither has initiated the cooperative program, Massachusetts plans to enter by July. The State has a large garbage-feeding industry and sees garbage-cooking law compliance as a major problem.

Massachusetts reported significant achievements for the year: (1) Education of the swine industry through press releases, meetings, and personal contact in the field; (2) increased acceptance of the new hog cholera regulations; (3) improvement in garbage-cooking equipment; and (4) improvement in the attitude of producers toward the value of a good garbage-cooking program.

Rhode Island reports excellent coverage of garbage-feeding operations. Also on the plus side of the ledger was the fact that both States had procedures in effect for immediate reporting, complete investigation, and quarantine of hog cholera suspicious herds. Massachusetts reported three outbreaks of hog cholera last year; Rhode Island reported one.

THE SOUTH AND SOUTHEAST

Florida is currently the only State in the Nation operating in Phase III of the program. This is the earliest phase of the program providing for cooperative State-Federal indemnities to help eradicate hog cholera. Florida entered Phase I in January, Phase II in late June, and then moved into Phase III on October 12, 1963.

Florida has a warning system in effect which involves routine inspection of premises surrounding an outbreak. This inspection is made by the veterinary diagnosticians and district veterinarians as they make their

investigations. The area covered depends on the extent of the infection and the source of additions. Usually, county agents and practicing veterinarians are also advised of the outbreak.

Florida's apparent progress in Phase III of the eradication program is reflected in disease reports. In October, 16 suspicious cases were reported--only 10 of which were confirmed as hog cholera. In only one case in each of the next two months was the diagnosis confirmed as hog cholera--even though seven were reported in November and six in December.

The State reports its problems concern complacency of swine owners about vaccination and obtaining the understanding of swine dealers concerning the vaccination program.

Georgia also has a very active and well-planned eradication program which has been successful. Georgia began a State-supported indemnity program in May 1962. Originally this was operated on a county basis, with a 60-percent vaccination level as one of the requirements for entry into the indemnity program. By the following April, with more than 70 percent of the State's swine population covered by the program, Georgia enlarged the program to cover the entire State, regardless of previous vaccination level.

The Georgia eradication program has markedly reduced the incidence of hog cholera, as evidenced by these figures: From May 4, 1962, through April 30, 1963, with approximately one-third of the State under the program, there were 248 outbreaks of hog cholera reported. From May 1, 1963, through December 31, 1963, with the entire State under the program, only 99 outbreaks were reported.

The cooperative State-Federal program was initiated in Georgia on January 1, 1963, and the State moved to Phase II the following August. A problem reported by Georgia is that its epidemiologists do not have enough time to make complete investigations of outbreaks, due to the press of routine duties.

Delaware was one of the early leaders in the hog cholera eradication program, moving directly to Phase II in January 1963. The State has not established a specific goal for entering Phase III, since they feel that further advancement must wait until surrounding States are operating at or near the same level. One outbreak was reported last year.

Delaware had one of the earlier warning systems developed in connection with the cooperative hog cholera eradication program. State and Federal employees call on farmers in an area up to five miles around an outbreak and recommend vaccination of susceptible swine. Farmers are alerted as soon as possible after the diagnosis has been confirmed as hog cholera, usually within 24 to 48 hours of the outbreak report.

The State reports that problems center around (1) complacency of hog producers when the incidence of hog cholera is low and (2) lack of indemnity funds. Achievements include (1) intensive supervision over auction markets, (2) marked increase in official farm vaccinations, and (3) the restriction of usage of virulent virus.

Louisiana entered Phase II of the program in November, following entry into Phase I the previous January. A considerable problem involves garbage feeding. In the latter part of 1963, court action was taken by a small group of garbage feeders to invalidate the State's garbage-cooking law. The State successfully defended its position and no change was made in the law; however, the feeders have re-opened the case.

Goal for entering Phase III is January 1965. Obstacles to be overcome include (1) improvement in the reporting system and (2) better informational coverage of the program. There were 21 outbreaks of hog cholera reported in Louisiana in 1963.

Arkansas' cooperative program was initiated at the Phase I level last July. No specific goal for entry into Phase II has been established, since additional State legislation is needed to control intrastate shipment of swine so that feeder pigs and breeding stock are vaccinated before moving from markets to farms.

The State feels its biggest achievement last year was in educating hog dealers that interstate shipments are subject to regulations. Arkansas reported 54 outbreaks during the year.

Tennessee entered the program last January. Problems to be solved before moving to Phase II include (1) increasing the frequency of garbage-cooking inspections, (2) establishing a system for prompt reporting of hog cholera, and (3) activation of the State Hog Cholera Eradication Committee. An additional problem of concern to Tennessee during the past year involves the qualification of feeder pigs for compliance with both Federal and State of destination requirements. The State reported 41 outbreaks in 1963.

Alabama became the first State to formally enter the cooperative hog cholera eradication program on December 4, 1962.

A warning system in existence 18 months in Alabama depends on a combination of personal contacts, mail, news items, and radio broadcasts to alert farmers to the dangers of a hog cholera outbreak. Farmers are alerted within 48 hours of the report, with the area covered depending on the concentration of hogs. The State reported 55 outbreaks last year.

The principal problem reported by Alabama is complacency on the part of the hog producer--particularly where hog cholera does not occur in a specific area. The State lists four achievements for the year: (1) Training a veterinary diagnostician; (2) opening an additional diagnostic laboratory which is in one of Alabama's major hog areas, (3) approval of a definite cooperative program for hog cholera eradication, and (4) establishing proper reporting by telephone.

Mississippi entered Phase I in January 1963.

During the year, Mississippi instituted quarantine procedures for suspected cases of hog cholera; however, no outbreaks were reported. The State also feels it has done a good job in publicizing the requirements for both intrastate and interstate shipment of pigs and has gained the cooperation of persons concerned with these regulations.

In South Carolina, which came into the program in March, the paramount problem is the large number of very small garbage feeders. There are over 1,000 feeders, thus some 2,000 inspections are needed monthly to meet the requirements for entering Phase II of the program.

But South Carolina is attempting to meet this challenge. In December 1963, all of the garbage-feeding premises were inspected once and 86 percent were inspected twice. The State feels that it can qualify for Phase II otherwise, and, from there, South Carolina plans to eliminate Phase III and go directly to Phase IV. The goal for Phase IV is January 1967.

Biggest achievement in South Carolina in 1963 was the marked reduction in the incidence of hog cholera, with only 35 outbreaks reported as compared to 203 in 1962.

North Carolina entered the program last March and plans to move to Phase II by March of 1964. The State recently instituted a warning system in which farmers adjacent to an outbreak who own swine are alerted by personal contact of the investigator or livestock inspector. In the North Carolina system, farmers are alerted only after hog cholera has been diagnosed. Although the warning system has been in effect only a short time, it has already resulted in a reduction of the incidence of hog cholera.

North Carolina faces almost the same kind of problem with garbage feeders as South Carolina. North Carolina does not have quite as many feeders, but the number of small feeders is large. They have been able to attain 100 percent inspections once a month, and twice-a-month inspections ranged up to 81 percent during the last quarter of 1963.

The biggest problem area reported by North Carolina concerns shipment of swine in accordance with regulations. Most significant achievement was the reduction of incidence of hog cholera, with 118 outbreaks reported last year, 360 the year before.

Virginia began joint program activity last January and plans to enter Phase II by May 1964. The goal for Phase III is a year later, in May 1965. Virginia has provisions for supervising interstate shipments of swine in effect now and plans to institute procedures for quarantine of hog cholera suspicious herds by May.

The control of intrastate shipments of swine--including vaccination and identification of feeder pigs moving through markets--was one of Virginia's biggest accomplishments last year. Also, they were able to achieve twice-monthly inspection of garbage-feeding premises.

Virginia foresees three problem areas: (1) Stimulation of high-level vaccination, (2) control over movements of non-vaccinated pigs, and (3) combating complacency among swine growers. Thirty-seven outbreaks of hog cholera were reported in the State last year.

Maryland entered the program in January 1963, and plans to go into Phase II in February 1964. The State plans to move into Phase III two months later in April. Twice-monthly inspection of garbage feeders has been at or near 100 percent during the last quarter of the year. Intrastate shipping rules are presently being revised.

A hog cholera warning system has been in effect in the State for over a year. In this system, regulatory personnel and newspapers are used to contact farmers in the area of an outbreak as soon as possible after hog cholera is reported.

Maryland lists better supervision over markets as one of its accomplishments for the year. Officials also note that reporting of outbreaks by practitioners has been much more effective than in the past. Eighteen outbreaks of hog cholera were reported in 1963.

Puerto Rico initiated the program last January and has a goal of August 1964 for beginning Phase II operations. Although quarantine regulations are in operation, officials report that the Commonwealth needs regulations requiring dealers to be licensed and to keep adequate records.

Puerto Rico is presently carrying out an extensive vaccination program. They regard their system as good, and other achievements include an intensification of their garbage-fed swine inspection. Problems concern additional personnel to carry out both the necessary vaccinations and inspections of garbage feeders. Seventeen outbreaks of hog cholera were reported in Puerto Rico in 1963.

Other Program Activity

The following tables summarize some of the questions of general interest which were included in the year-end survey of program activity in the various States. The figures, in all cases, refer to only the 38 States and Puerto Rico which were formally enrolled in the cooperative program by the end of 1963.

Table 1. From the standpoint of the goal of eradication and the present status of the program in your State---

Are Federal interstate regulations on hog cholera:

<u>Phase</u>	<u>Generally Satisfactory?</u>	<u>Too Restrictive?</u>	<u>Not Sufficiently Restrictive?</u>
I	20		3
II	7	1	4
III			1
IV	3		
Total	30	1	8

Are present State regulations on intrastate shipment:

<u>Phase</u>	<u>Generally Satisfactory?</u>	<u>Too Restrictive?</u>	<u>Not Sufficiently Restrictive?</u>
I	20		3
II	9	1	2
III	1		
IV	3		
Total	33	1	5

Table 2. Are you and the State having any difficulty in carrying out garbage-cooking laws:

<u>Phase</u>	<u>Yes</u>	<u>No</u>
I	9	14
II	5	7
III		1
IV	1	2
Total	15	24

Table 3. Does your State have a diagnostic laboratory which is adequately equipped and staffed for hog cholera diagnosis?

<u>Phase</u>	<u>Yes</u>	<u>No</u>
I	19	4
II	11	1
III	1	
IV	3	
Total	34	5

If so, is the laboratory utilized fully in support of the program (34 replies)?

<u>Phase</u>	<u>Yes</u>	<u>No</u>
I	13	6
II	9	2
III	1	
IV	2	(One State not applicable)
Total	25	8 (9)

Table 4. What is the usual time between receipt of hog cholera suspicious specimens and issuance of a laboratory report?

<u>Phase</u>	<u>1-4 Days</u>	<u>5-7 Days</u>	<u>Over 7 Days</u>
I	18		1
II	6	3	1
III	1		
IV	1	1 (7 States not applicable)	
Total	26	4	2

The following tables concerning State Hog Cholera Eradication Committees are based on replies from all States (Alaska and Texas did not respond). A year ago, in February 1963, Committees had been organized in a total of 35 States.

Table 5. Do you have a State Hog Cholera Eradication Committee? If so, is the Committee active (43 replies)?

<u>Phase</u>	<u>No</u>	<u>Yes</u>	<u>Active</u>	<u>Inactive</u>
0	4	6	2	4
I	2	21	20	1
II		12	10	2
III		1	1	
IV		3	2	1
Total	6	43	35	8

Table 6. Would Committee representatives meet to discuss common problems with other States (38 replies)?

<u>Phase</u>	<u>Yes</u>	<u>No</u>	<u>Perhaps</u>
0			2
I	16	1	3
II	8	2	
III	1		
IV	1	1	
Total	26	4	5

Table 7. A portion of the year-end survey was devoted to the eradication program's information needs. States were asked to rank various topics in degrees according to how well the States regarded the industry to be informed on each subject. This table summarizes the answers from 47 States and Puerto Rico. As mentioned perviously in the report, two States did not respond to the survey, and the response to this question from one additional State was not included in the summary as all items were ranked equally.

	<u>Best Informed</u>	<u>Fairly Well Informed</u>	<u>Least Informed</u>
Garbage Cooking	29	15	4
Reporting Outbreaks	21	24	3
Quarantine Needs	17	25	6
Vaccination (High)	21	14	13
Eradication	9	25	14
Shipping Rules	3	32	13
Program Progress	4	2	42
Indemnity	1	2	45

U. S. DEPT. OF AGRICULTURE
NATIONAL AGRICULTURAL LIBRARY

JUL 21 1964

C & R-PREP.